

INTERIM MANAGEMENT PLAN

**TO FACILITATE THE AGUA HEDIONDA LAGOON
CAULERPA TAXIFOLIA ERADICATION PROGRAM**

June 4, 2002

Prepared by:

Agua Hedionda Lagoon User Representatives (AHLUR)

the

Southern California Caulerpa Action Team (SCCAT)

and the

**City of Carlsbad
Police Department
Planning Department**

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PURPOSE AND OVERVIEW

The purpose of this Interim Management Plan for Agua Hedionda Lagoon ("Management Plan") is to facilitate the successful implementation of the Rapid Response and Eradication Program for the invasive green alga, *Caulerpa taxifolia* overseen by the Southern California *Caulerpa* Action Team ("SCCAT"). The Management Plan provides a regulatory framework for a cooperative relationship between lagoon users and those overseeing and implementing the eradication efforts. It includes elimination of some recreational uses altogether as well as time and place regulation of other recreational activities until *Caulerpa* can be eradicated from the lagoon system. The Management Plan is being undertaken as a pilot effort in an attempt to minimize impacts to lagoon users while continuing to accomplish the work necessary to eradicate *Caulerpa* from the lagoon.

The overriding purpose of this Management Plan is to facilitate the safe and efficient eradication of *Caulerpa taxifolia* in an expeditious manner and thereby minimize the risk of spread of this species to the outer coast. Thus, the regulations contained within it are designed to accommodate *Caulerpa taxifolia* surveys and eradication efforts first and, secondarily, recreational use of the lagoon. Safe implementation of the program is construed to mean that the program is safe for the public lagoon users as well as for the eradication implementation team.

Management Plan implementation is to be overseen by SCCAT members with the cooperation of recreational lagoon users and the concurrence of the City of Carlsbad. Participation of recreational lagoon users is an essential element of this plan, particularly businesses and waterfront property owners who control or regulate access to the lagoon. Successful implementation will depend on educating all lagoon users and self-policing by recreational users. Also, adequate notice of survey and eradication efforts by SCCAT is an essential component of the Plan.

Although the Plan anticipates voluntary compliance, recreational use limitations established by the Plan are to be incorporated into the Agua Hedionda Lagoon Regulations found in Chapter 11.24 of the Carlsbad Municipal Code ("CMC") and will be subject to enforcement by the Carlsbad Police Department, as well as other law enforcement personnel, including, but not limited to, California Department of Fish & Game wardens.

SCOPE AND DEFINITIONS

The scope of this Management Plan is limited to the inner lagoon portion of the Agua Hedionda Lagoon that is subject to the regulations found in Chapter 11.24 of the Carlsbad Municipal Code.

This Management Plan is specifically designed to address an interim condition of the lagoon and is not intended to establish a permanent change in lagoon uses. Long-term lagoon uses are subject to actions of the underlying private land owner, the City of Carlsbad, and various state and federal resource and regulatory agencies acting within the context and constricts of their individual regulatory authorities. Nothing in this Management Plan shall be construed as either expanding or contracting the separate authorities of these parties and nothing in this plan shall be construed as dictating future options for lagoon management.

The definitions in Section 11.24.010 of the Carlsbad Municipal Code apply to this Management Plan. Other definitions applicable to this plan are outlined as follows:

Agua Hedionda Lagoon User Representatives (AHLUR) – The following representatives:

- Wayne Brechtel, Bristol Cove Property Owners Association
- Jim Courtney, Carlsbad Boat Club
- Gene Huber, North Shore Property Owners
- Mike Marsdon/Floyd Packard, Recreational Boating
- Richard Mahler, Bristol Cove Boat & Ski Club
- Diane Richards, Passive Users
- Greg Rusing, California Water Sports

Designated representatives may be changed by providing written notice to the City of Carlsbad and the SCCAT Steering Committee.

Eradication Activities – All activities including survey and treatment being undertaken within Agua Hedionda Lagoon to eliminate the presence of *Caulerpa*.

Eradication Team or Eradication Contractor – Any person or entity under contract with the City of Carlsbad or authorized by the City of Carlsbad to conduct *Caulerpa taxifolia*, eradication work within Agua Hedionda Lagoon.

SCCAT – Southern California *Caulerpa* Action Team, a multiple agency and organization group established to respond to the California infestations of *Caulerpa taxifolia*, including, among others, representatives from the Regional Water Quality Control Board, California Department of Fish and Game, National Marine Fisheries Service, Agua Hedionda Lagoon Foundation and Cabrillo Power I, LLC. The City of Carlsbad's City Manager or a designee is invited to attend all

SCCAT and SCCAT Steering Committee meetings to serve as a liaison between the City and these groups.

SCCAT Steering Committee – The decision-making managing board of SCCAT consists of the following:

- Robert Hoffman, National Marine Fisheries Service (lead Federal agency)
- William Paznokas, California Department of Fish & Game (lead State agency)
- Bruce Posthumus, Reg. Water Quality Control Board-Reg. 9 (SCCAT chair)
- Lars Anderson, U.S. Dept. of Agriculture (SCCAT Tech. Committee chair)

Lagoon Management Committee - The collective authors of the Management Plan are: SCCAT, AHLUR, and representatives from the City of Carlsbad Recreation, Planning and Police Departments.

EXTENSION OF FISHING AND ANCHORING PROHIBITION

Fishing and anchoring of vessels have been identified as one cause of *Caulerpa taxifolia* spread in other jurisdictions. To avoid this potential risk factor, all fishing and anchoring of vessels within the inner lagoon shall be prohibited for a preliminary period of one (1) year. However, prior to November 2002, the SCCAT Steering Committee will assess the feasibility of opening the east end of the lagoon to fishing during the period of November 2002 through April 2003 and will make the appropriate recommendation to the City of Carlsbad.

Implementation: CMC Amendment, effective until June 1, 2003. Prior to any scheduled expiration of the fishing and anchoring prohibition, the Lagoon Management Committee shall report back to the Carlsbad City Council and make recommendations regarding whether it should be extended and/or modified.

Enforcement: Carlsbad Police Department and other law enforcement personnel, not limited to California Department of Fish & Game wardens.

SURVEY ZONE CLOSURES

Early detection, containment and treatment are essential to successful eradication of *Caulerpa taxifolia*. This Management Plan seeks to maximize survey conditions and allow for efficient and safe surveys by SCCAT members. To carry out these objectives, the inner lagoon is divided into six (6) survey zones and defined transit corridors (Figure 1). Figure 2 includes a preliminary schedule for completion of work during Spring and Summer 2002 based on an estimate of the days required to complete the work in each area. The estimates are not fixed guarantees, but are general guidelines for completion of the surveys. Survey times can be longer and shorter depending upon a number of unpredictable factors, including funding, weather, water clarity, tides, and the presence of *Caulerpa* requiring treatment.

Lagoon zones shall be closed for surveys as follows:

Zone 1: No closure. Survey and eradication efforts shall be coordinated with use of Zone 1 by recreational users for boat transit purposes.

Zone 2: Closed to all recreational use. No limitation of survey and eradication work including weekends and holidays.

Zone 3: Closures shall generally be limited to periods before 11am that are coordinated with tide cycles and California Water Sports group uses to the extent practical. Closure schedules in Zone 3 are anticipated to be more dynamic due to its close proximity to the lagoon inlet which creates significant currents during tidal exchange periods and which can impair survey effectiveness.

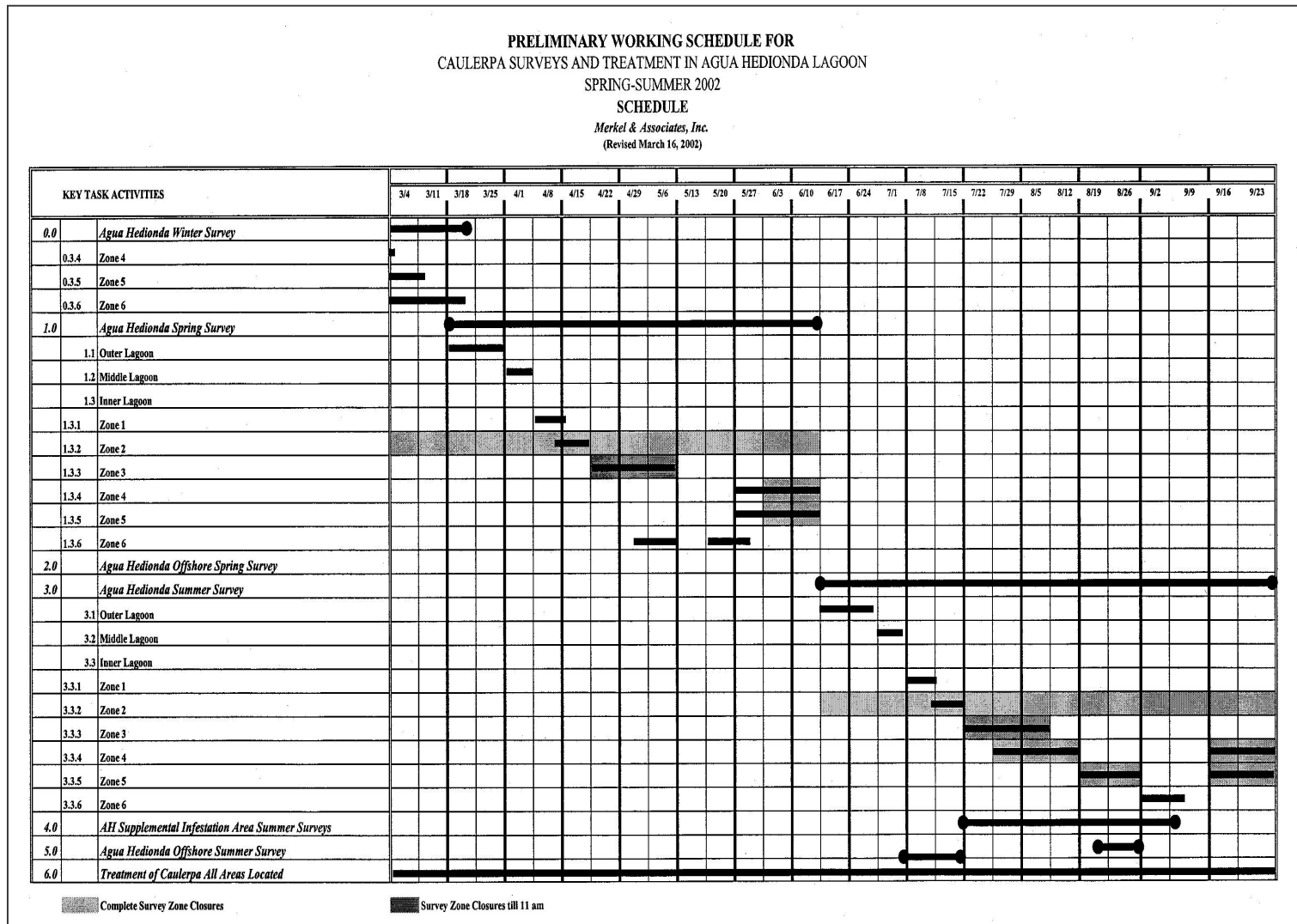
Zones 4 and 5. Closed during survey periods between the hours of 7:00 a.m. and 3:00 p.m. However, use of the Slalom course shall be permitted, subject to closure if it is determined by the Eradication Team or Eradication Contractor, subject to review by the City of Carlsbad, that such use is impeding survey or eradication efforts. Generally, Zones 4 and 5 will be closed simultaneously to reduce turbulence and turbidity during surveys. Simultaneous closure of Zones 4 and 5 is a concern to recreational users, particularly during the summer months, because the dual closures will exclude most powerboats during the time of greatest use. At the same time, the ability to survey Zones 4 and 5 during summer months is important to the Caulerpa eradication program because plant growth is most rapid in the warmer months. In an effort to accommodate these competing interests, surveys of Zones 4 and 5 will be staggered during August, so that one zone stays open while the other is closed. In addition, no surveys of Zones 4 and 5 are scheduled during July, and the late summer survey is not scheduled to begin until the third week of September.

Zones 6. Zone 6 shall remain open to passive uses and use of the slalom course. Uses shall be permitted subject to closure if it is determined by the Eradication Team or Eradication Contractor, subject to review by the City of Carlsbad, that such uses are impeding survey or eradication efforts.

Figure 1. Agua Hedionda Lagoon Inner Lagoon Survey Zones.



Figure 2. Agua Hedionda Lagoon Inner Lagoon Survey Schedule .



Transit Zones: Transit zones shall be no wake 5 mph zones within 200 feet of any eradication efforts. Transit zones shall stay open during closure periods, unless it is determined that portions must be closed to accommodate survey or eradication efforts. In such instances, the duration of any transit zone closure shall be limited to the extent possible and alternative transit shall be accommodated around the closure area.

Slalom Course: The slalom course shall remain open under the current governing regulations. However, when eradication work is to occur within the course area, this work shall take precedence over other uses, and boats will not be run through the course while eradication activities are within 200 feet of the course. Course users are expected to experience intermittent delays while the area is surveyed.

Weekends and Holidays: With the exception of Zone 2, which is closed entirely to recreational use, closures shall not occur unless it is determined that special circumstances require work during weekends and holidays. In such instances, closures shall be limited to the extent possible.

Impact of Closures: Except where expressly stated otherwise, closure of a zone shall prohibit all recreational activities. Non-closure of a zone shall not prohibit ongoing eradication work. Recreational use of a closed zone may be allowed on individual days, if such use would not impede survey or eradication work. There is no obligation to allow use of a closed zone, and any authorization granted will never extend beyond the day it was granted.

Implementation: Closures shall be scheduled by the eradication contractor, at least one week in advance whenever possible, and notice shall be provided as follows:

1. **Weekly Postings:** At the beginning of each week, a schedule of closure dates and times, going out at least four weeks, shall be posted at lagoon launch facilities, selected public access points and on a designated internet website. A copy will also be placed on file in the City Clerk's office. The postings shall include a zone map with closure information, the date the schedule was last updated and a call-in telephone number for more current information.
2. **Daily Updates:** Daily updates of closure information will be provided on a recorded telephone message that can be accessed by using the designated call-in number.

This Plan provides a flexible approach to allow extension of closures when necessary and reduction in closures when circumstances allow. For this reason, a daily check of the dial-in recording is considered to be the best source for current information.

Closure Markers: During closure periods, individual Zones shall be marked with a centrally located closure marker.

AREA CLOSURES FOR CAULERPA TREATMENT

It is anticipated that *Caulerpa* infestation areas are likely to be found during the completion of summer season surveys. To minimize spread of *Caulerpa*, it is imperative that material be contained and treated in the most expeditious fashion practical. This may require up to several days to accomplish containment and treatment of identified patches, and work will generally commence upon identification and assessment of any material located. While treatment is being accomplished in a given area, one or more affected zones may be closed to recreational uses, or smaller treatment areas may be buoyed off to protect the treatment area and eradication team staff working within the site. Treatment areas shall be fully marked and monumented during completion of work. Closures for treatment may occur at any time and will be noticed on the dial-in recording. Efforts will be made to efficiently and expeditiously treat any identified *Caulerpa*.

PROHIBITION OF LARGE WAKES

Creation of large wakes within the inner lagoon shall be prohibited for a preliminary period of one (1) year. For purposes of this section, large wakes are defined as wakes in excess of 12 inches when measured from the undisturbed water surface to the top of crest.

Implementation: CMC Amendment, effective until June 1, 2003. Prior to any scheduled expiration of the large wake prohibition, the Lagoon Management Committee shall report back to the Carlsbad City Council and make recommendations regarding whether it should be extended and/or modified.

Enforcement: Large wake generation prohibitions shall be enforced by the Carlsbad Police Department and other law enforcement personnel, not limited to California Department of Fish & Game wardens.

SAFETY

To help ensure the safety of the public using the lagoon and the eradication team, the following actions are to be taken: 1) eradication efforts are to be coordinated with the public through internet and call-in notification processes described elsewhere; 2) eradication work areas are to be well marked while activities are underway; 3) areas supporting small floats are to be denoted by larger floats delimiting the area, and no small floats are to be left in the water over a weekend; 4) lines placed on the bottom to guide surveys or mark treatment areas shall be well anchored near the bottom and shall be of a non-floating material; and, 5) except as required in transit lanes, boaters are to keep 200 feet from eradication vessels flying a dive flag or operating a survey beacon denoting limited maneuverability. Within transit lanes, boats passing within 200 feet of an eradication operation shall maintain a speed of 5 mph.

This Plan does not alter the City of Carlsbad's authority to regulate the lagoon for safety purposes. If at anytime the City deems that the Plan is either not being safely implemented or cannot be safely implemented, the City shall take whatever actions it deems prudent and are required to ensure protection of all lagoon users.

INSPECTION OF VESSELS AND EQUIPMENT

While *Caulerpa taxifolia* is negatively buoyant and thus tends to sink, there is a slight potential that material may be inadvertently picked up on boats, trailers, water skies, wakeboards, or other equipment and transferred out of the lagoon and potentially to other waterbodies. To curb the risk of *Caulerpa* spread, lagoon users shall inspect their personal boats and equipment for any fragments of *Caulerpa* whenever they are pulled from the water. In the event that any plant material is found on equipment or vessels, the material shall be removed, be placed in a sealed container and be disposed of pursuant to posted directions or, in the alternative, shall be turned over to a representative of the Eradication Team or Eradication Contractor, along with any information that may be helpful in determining the source of material within the lagoon, such as areas in which the vessel or equipment had been last used. As a condition of obtaining a Lagoon Use Permit, equipment and vessels leaving the lagoon shall be subject to inspection for the presence of *Caulerpa* by the Carlsbad Police Department and other law enforcement personnel, not limited to California Department of Fish & Game wardens.

OVERALL PLAN ENFORCEMENT

This Plan is intended to be adopted through amendments to the Carlsbad Municipal Code and shall be enforceable by the Carlsbad Police Department, as well as other law enforcement personnel, not limited to California Department of Fish & Game wardens. Penalties for violations may entail fines and/or denial, suspension or revocation of lagoon permits.

It is to the benefit of all lagoon users to self-police their activities and voluntarily comply with this Management Plan in order to best protect the safety of the general public and members of the *Caulerpa* eradication team, and to most effectively facilitate the efficient implementation of the *Caulerpa* eradication program.

PLAN APPROVAL:

This Plan shall be subject to adoption by the City of Carlsbad by resolution of the City Council. The the Agua Hedionda Lagoon Ordinance, found in Chapter 11.24 of the Carlsbad Municipal Code, shall be amended where necessary to ensure the closure and use regulations of this Plan are enforceable.

PLAN AMENDMENTS

This Plan has been prepared to address concerns for efficiency of eradication efforts, as well as safety concerns for both public lagoon users and eradication teams. The Plan is a pilot effort to coordinate activities to the extent practical. However, it has no precedent within the lagoon and, as such, should be considered a trial attempt. Recognizing this fact, it is assumed that there may be occasions where there is a need to revisit elements of the Plan and make amendments. Such needs have been contemplated in the drafting of this Plan. To ensure that Plan flexibility is provided and readily accommodated, the following approval and amendment process is incorporated.

Plan amendments shall require approval of the City of Carlsbad by resolution of the City Council. Prior to consideration of any Plan amendments, written notice of the proposed amendments shall be provided to the SCCAT Steering Committee, Agua Hedionda Lagoon User Representatives, City of Carlsbad's City Manager, Planning Director, Police Chief, and Recreation Director, or their designated representatives. Whenever possible, at least 30 days notice shall be provided, and the parties shall meet to discuss and work in good faith towards a consensus recommendation to the City Council. If a consensus is not reached, the City Council shall be informed of the differing viewpoints.

ANNUAL REVIEW AND REPORT TO THE CITY COUNCIL

The Lagoon Management Committee shall report back to the Carlsbad City Council annually, beginning no later than January 2003, regarding the Management Plan's effectiveness and shall make recommendations regarding extension and/or modification of Plan elements as required by the Plan or as the Committee or its members deem appropriate.